

7.1.1 Minimum Efficiency Standards and Maximum Energy Use for Typical Single-Family Residential Heating and Cooling Equipment

	Minimum Efficiency (1)		Maximum Energy Use for Space Heating (2)							
			1992				2006			
			New		Existing		New		Existing	
	1992	2006	North	South	North	South	North	South	North	South
Heating Equipment										
Natural Gas, Furnace	78 AFUE	78 AFUE	1170	445	1489	771	1170	445	1489	771
Oil, Boiler	80 AFUE	80 AFUE	731	N.A.	930	422	731	N.A.	930	422
Electric, Heat Pump	6.8 HSPF	7.7 HSPF	12923	4685	11232	5546	11412	4137	9919	4898
	Minimum Efficiency (3)		Maximum Electricity Use for Space Cooling							
			1992				2006			
			New		Existing		New		Existing	
	1992	2006	North	South	North	South	North	South	North	South
Cooling Equipment										
Central Air Conditioner	10 SEER	13 SEER	1113	2543	1000	3743	927	2119	833	3119
Electric, Heat Pump	10 SEER	13 SEER	1100	2414	813	2657	846	1857	625	2044

Note(s): 1) AFUE = Annual Fuel Utilization Efficiency. HSPF = Heating Season Performance Factor. 2) Gas use is in therms. Oil use is in gallons. Electricity use is in kWh. 3) SEER = Seasonal Energy Efficiency Ratio.

Source(s): DOC/GPO, Title 10, Chapter 2, Part 430, Section 430.32, Jan 1, 2001, p. 259 for efficiencies; LBNL, Energy Data Sourcebook for the U.S. Residential Sector, Sept. 1997, Table 3.20, p. 52-53 and Table 3.21, p. 58; and Federal Register, Energy Conservation Program for Consumer Products: Central Air Conditioners and Heat Pumps Energy Conservation Standards, Vol. 66, No. 14, Jan. 22, 2001, p. 7170 for central air conditioner and heat pump.